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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,757	10/06/2000	Joseph B. Rowlands	5580-00700	2137

7590 06/19/2003

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EXAMINER

VO, TIM T

ART UNIT	PAPER NUMBER
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2189

DATE MAILED: 06/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/680,757

Applicant(s)

ROWLANDS ET AL.

Examiner

Tim T. Vo

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>2,5</u> | 6) <input type="checkbox"/> Other: |

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Part III DETAILED ACTION

Notice to Applicant(s)

This application has been examined. Claims 1-6 and 8-34 are pending.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. § 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-6 and 8-34 are rejected under 35 U.S.C. § **102(b)** as being anticipated by Thayer et al. patent number 5,168,568.

As for claims 1, 10, 16, 24 and 30, Thayer teaches a system comprising:

a bus (see figure 6, bus 24);

a plurality of agents coupled to the bus (see figure 6, CPU 12, CPU 12a, 18), each of the plurality of agents configured to arbitrate for the bus (see column 12 lines 38-41), and wherein a predetermined first agent of the plurality of agents is a default winner of an arbitration if none of the plurality of agents for the bus during the arbitration (see column 13 lines 42-46, wherein the CPU 12 is a first agent and it is set by default as a winner when no other device requesting).

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As for claims 2, 11, 17 and 25, Thayer teaches the first agent is the default winner independent of which the plurality of agents was last to use the bus (see column 13 lines 42-46).

As for claims 3, 13, 18 and 27, Thayer teaches a plurality of request signals (see figures 2, 6, 7, 11, preempt signals 44 and column 8 lines 60-67), each of the plurality of the request signals correspondingly to a respective agent of the plurality of agents and used by the respective agent to indicate whether or not the respective agent is arbitrating for the bus (see figures 2, 6, 7, 11, preempt signals an column 8 lines 60-67 wherein figure 6 discloses plurality of agents such as CPU 12, 12a, 18 are coupling to bus 24, wherein the bus 24 comprising preempt signal. The preempt signal is equivalent to request signal because when a device requires the use of the bus 24 that device assert the preempt signal 44), and wherein the first agent is coupled to receive at least one of the plurality of request signals correspondingly to other ones of the plurality of agents (see figure 1, motherboard 30, CPU 12, 126, wherein the CPU 12 is the first agent to send preempt signal to the arbitration 126 logic which is the same CACP logic 32), and wherein the first agent is configured to determine if none of the plurality of agents is arbitrating responsive to the plurality of request signal (see column 11 lines 41-46).

As for claims 4-5, 12, 19-20, 26 and 32, Thayer teaches the us is a split transaction bus including an address bus and a data bus (see figure 2, bus 24, including address bus 34, data bus 36), and wherein the first agent is the default winner of the

data bus responsive to none of the plurality of agents arbitrating for the data bus (see column 11 lines 41-46).

As for claims 6, 21 and 31, Thayer teaches wherein the first agent is configured to arbitrate for the bus if at least one other of the plurality of agent is arbitrating for the bus during the arbitration and the first agent has information to transfer on the bus (see column 12 lines 38-51).

As for claims 8-9, 22-23, 28-29 and 33-34 Thayer teaches one or more arbiters configured to perform the arbitration (see figure 6, arbiter 126, 14, 122, 22), wherein the one or more arbiters are configured to maintain a state indicative of an arbitration priority of the plurality agents, and wherein an agent winning an arbitration is changed to lowest priority in the arbitration priority (see column 5 line 54 to column 6 line 4).

As for claims 14-15, Thayer teaches the arbiter comprising a storage coupled to the second circuit, the storage storing indication of the relative priority of the other ones of the plurality of agents to the first agent, and wherein the winner of the arbitration is updated to lowest priority (see figure 6, main memory 14 and column 5 line 54 to column 6 line 4).

Response to Amendment

2. In response to the applicant arguments that Thayer does not teach or suggest "said first agent is an equal arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by the system". Examiner acknowledges this feature was rejected in claim 7 by column 12 lines 39-44 of Thayer. From figure 6, examiner cited processors 12 and 12a as being plurality of agents, wherein the first

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agent a processor 12 and other ones a processor 12a. Note, examiner did not include all devices in the figure 6 because using the processors 12 and 12a is enough to read on the claims limitations. Wherein column 12 lines 39-44 indicated both processors 12 and 12a are assigned to the lowest level of arbitration priority. This means processors 12 and 12a are equal to each other at the lowest level of arbitration priority. For this reason, disclosing processors 12 and 12a in figure 6 and column 12 lines 39-44 of Thayer anticipates "said first agent is an equal arbitration participant with other ones of said plurality of agents in an arbitration scheme implemented by the system".

3. New claims 24-34 having similar scopes of claims 1-23 therefore, they are grouped with the claims 1-23 correspondingly as rejected in the office action.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tim T. Vo whose telephone number is 703-308-5862.

The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on 703-305-4815. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-7239 for regular communications and 703-746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-2100.

A handwritten signature in black ink, appearing to read 'Tim Vo', with a long, sweeping horizontal line extending to the left.

Tim T. Vo
Examiner
Art Unit 2189

T.V
June 19, 2003